1. (Currently Amended) A method of generating an auxiliary symbol when a digital signal locked to a quadrature signal pair is received, the method comprising ~~the steps of~~:

determining nominal radii and range limits according to predetermined positions of the digital signal in a plane determined by the quadrature signal pair;

determining a preliminary symbol from the digital signal by sampling the digital signal as controlled by a symbol sampling clock;

determining polar coordinates of the preliminary symbol; ~~and~~

determining a nominal radius from the polar coordinates of the preliminary symbol according to the range limits, where the determined nominal radius and an angle component define polar coordinates of the auxiliary symbol in the plane of the quadrature signal pair; and

adjusting at least one decision-feedback controller of a demodulator in response to the auxiliary symbol.

2. (Previously Presented) The method of claim 1, further comprising the step of converting the polar coordinates of the auxiliary symbol into a Cartesian coordinate system determined by the quadrature signal pair.

3. (Previously Presented) The method of claim 1, where the digital signal comprises a digitized signal, and where the method further comprises the step of temporally interpolating the digitized signal as a function of a respective instant of the symbol sampling clock when a digitization clock and the symbol sampling clock are independent of each other.

4. (Previously Presented)   The method of claim 1, where the step of determining a nominal radius from the polar coordinates determines the nominal radius from a radius component of the preliminary symbol.

5. (Previously Presented)   The method of claim 1, further comprising the step of determining quadrature components of the auxiliary symbol from the determined nominal radius and the angle component.

6. (Previously Presented)   The method of claim 1, where the determined nominal radii comprise radii on which predetermined symbols of the alphabet lie in the plane determined by the quadrature signal pair

7. (Previously Presented)   The method of claim 1, where at least one of the range limits is defined by a radius limit.

8. (Previously Presented)   The method of claim 7, where at least one of the radius limits lies between adjacent ones of the nominal radii.

9. (Previously Presented)   The method of claim 1, where the step of determining nominal radii and range limits determines the range limits by defining limit radii that may comprise radii of a predetermined modulation standard.

10. (Previously Presented)   The method of claim 1, where adjacent ones of the limit radii define an annulus that includes at least one of the nominal radii.

11. (Currently Amended)   A circuit for generating an auxiliary symbol from a preliminary symbol in a device for receiving a digital signal locked to a quadrature signal pair, comprising:

a resolver that converts Cartesian quadrature signal components of the preliminary symbol into polar coordinates; ~~and~~

a radius decision stage that determines from the polar coordinates of the preliminary symbol the most probable nominal radius, where the most probable nominal radius and an angle component of the preliminary symbol define polar coordinates of the auxiliary symbol; and

a control unit that adjusts at least one decision-feedback controller of a demodulator in response to the auxiliary symbol.

12. (Previously Presented)   The circuit of claim 11, further comprising a second resolver that converts the polar coordinates of the auxiliary symbol to Cartesian coordinates in a plane determined by the quadrature signal pair.

13. (Cancelled)

14. (Currently Amended)   A circuit for generating an auxiliary symbol from a preliminary symbol in a device for receiving a digital signal locked to a quadrature signal pair, comprising:

a resolver that converts Cartesian quadrature signal components of the preliminary symbol into polar coordinates;

a radius decision stage that determines from the polar coordinates of the preliminary symbol the most probable nominal radius, where the most probable nominal radius and an angle component of the preliminary symbol define polar coordinates of the auxiliary symbol; and

a second resolver that converts the polar coordinates of the auxiliary symbol to Cartesian coordinates in a plane determined by the quadrature signal pair;

The circuit of claim 13, further comprising a multiplexer that selectively provides the auxiliary symbol to the at least one decision-feedback controller for control thereof,

where at least one decision-feedback controller in the device utilizes the auxiliary symbol for control thereof.

15. (Previously Presented)   The circuit of claim 14, where the multiplexer selectively provides a decision symbol in place of the auxiliary symbol to the at least one decision-feedback controller.

16. (Cancelled)

17. (Currently Amended)   A method for adjusting at least one decision-feedback controller within a demodulator using an auxiliary symbol in place of a decision symbol, the method comprising ~~the steps of~~:

receiving a digital signal locked to a quadrature signal pair;

determining nominal radii and range limits according to predetermined positions of the digital signal in a plane determined by the quadrature signal pair;

determining a preliminary symbol from the digital signal;

determining the auxiliary symbol from the preliminary symbol; and

adjusting the at least one decision-feedback controller in dependence on the ~~preliminary~~ auxiliary symbol.

18. (Previously Presented)   The method of claim 17, where the step of determining the auxiliary symbol from the preliminary symbol comprises the steps of:

determining polar coordinates of the preliminary symbol;

determining a nominal radius from the polar coordinates of the preliminary symbol in accordance with the range limits, the determined nominal radius comprising one of the nominal radii; and

determining the auxiliary symbol in terms of polar coordinates thereof, the polar coordinates of the determined auxiliary symbol comprising the determined nominal radius and an angle component of the preliminary symbol.

19. (Previously Presented)   The method of claim 18, where after the step of determining the auxiliary symbol in terms of polar coordinates thereof, the method further comprises the step of determining quadrature components of the auxiliary symbol from the determined nominal radius and the angle component.

20. (Previously Presented)   The method of claim 17, where the determined nominal radii comprise radii in which predetermined symbols of the alphabet lie in the plane determined by the quadrature signal pair.